

Photographs and videos regarding the Comment to the article: Rodríguez-López et al. (2024) Ice-rafted dropstones at midlatitudes in the Cretaceous of continental Iberia. *Geology*, v. 52, p. 33-38. doi: <https://doi.org/10.1130/G51725.1>.

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Here we provide a video, a 3D model, a map, and photographs of the deposits studied by Rodríguez-López et al., 2024 (Ice-rafted dropstones at midlatitudes in the Cretaceous of continental Iberia. *Geology*, v. 52, p. 33-38. <https://doi.org/10.1130/G51725.1>), which are useful to have a complete view of the studied deposits.

Video: A video showing the studied outcrop and the studied area is available at https://unioviedo-my.sharepoint.com/:v:/g/personal/quijadaisabel_uniovi_es/Ecl-ArGGYShPrzkTatSdYuoB_Nvy1M9kdVmq-Hj8iByVqA?e=VucKB8.

3D model: A 3D model of the studied outcrop is available to view and download through <https://skfb.ly/oNPAq>. Use the Agisoft Viewer for better viewing resolution and measurements.

Figures

Fig. C1. Aerial image and geological map (based on the GEODE map, scale 1:50.000) of the Enciso Gr at the studied area, showing the catalogued and published dinosaur tracksites in the area (red marks, based on Moratalla and Hernán, 2010 and Pérez-Lorente, 2015) and the location of the outcrop studied by Rodríguez-López et al., 2024 (yellow star). The “La cuesta de Andorra” tracksite, located ≈ 10 m below the studied deposits (just below the base of the section represented in their Fig. S1), is marked in blue color.

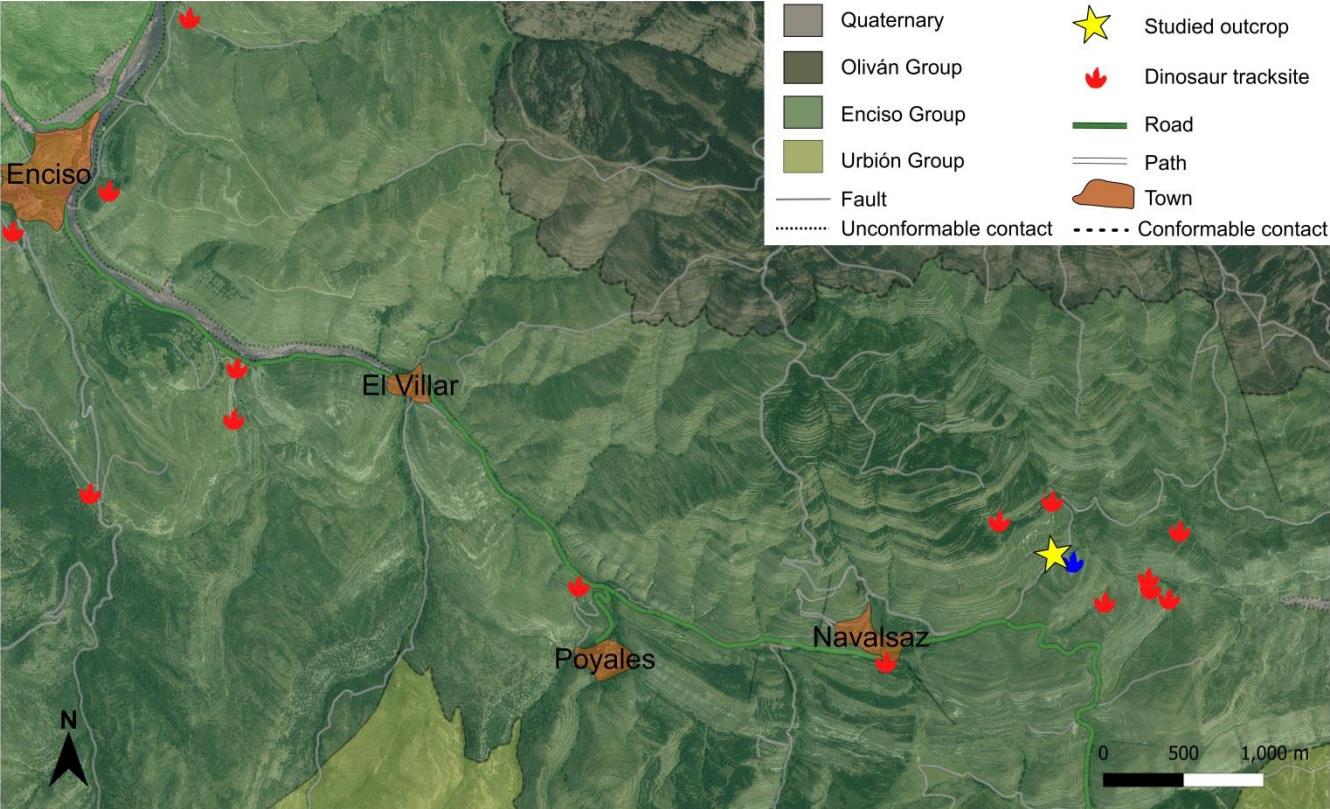


Fig. C2. Panorama of the outcrop studied by Rodríguez-López et al. (2024), showing the location of the rest of the figures shown in this report (in red) and in the aforementioned paper (in black), as well as the location of the samples (S1-S11) taken for the petrographic analysis in this report (see Fig. C6). The stratigraphic level containing the supposed “dropstones” is marked with blue arrows.



Fig. C3. Photograph showing the dinosaur footprints of the “La Cuesta de Andorra” tracksite, located around 10 m below the outcrop studied by Rodríguez-López et al. (2024), and just below the base of the section represented in their Fig. S1. See map of Fig. C1 and video V1 for location.



Fig. C4. Discrete carbonates (red squares) located along the same stratigraphic level than those interpreted as “glacial dropstones” by Rodríguez-López et al. (2024) (see Fig. C2 for location of Fig. C4A and B). Note the tabular morphology of many of them. Although these authors do not show photographs of these discrete carbonates, they also interpret them as “glacial dropstones” (see their Fig. S6), regardless their tabular morphology and their orientation parallel to stratification. The location of samples S5-S7 is shown in B.

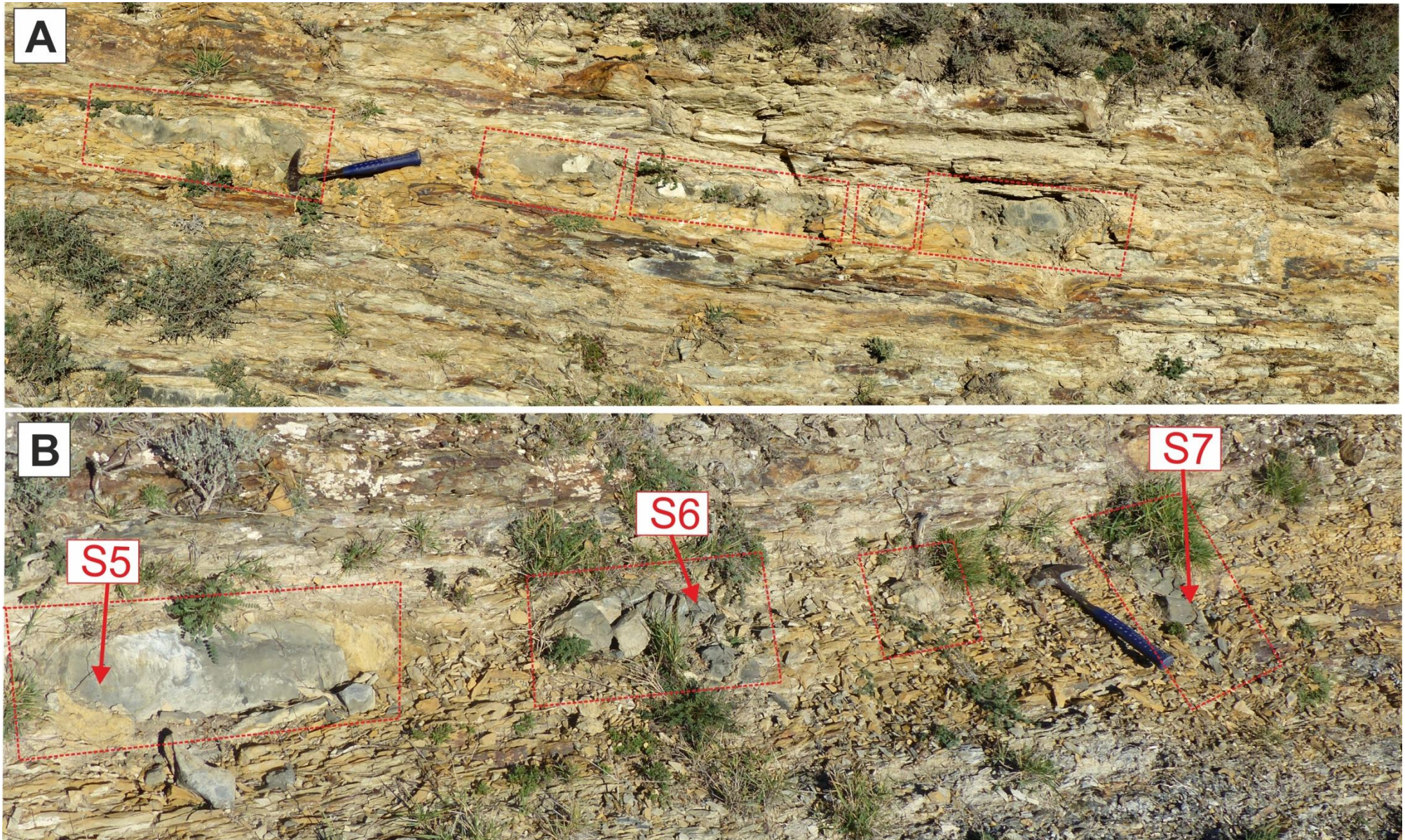


Fig. C5. Carbonate displaying a fracture filled by calcite (red arrows). This calcite vein is wrongly interpreted by Rodríguez-López et al. (2024), as the original stratification (see their Fig. 1E). See Fig. C2 for location.

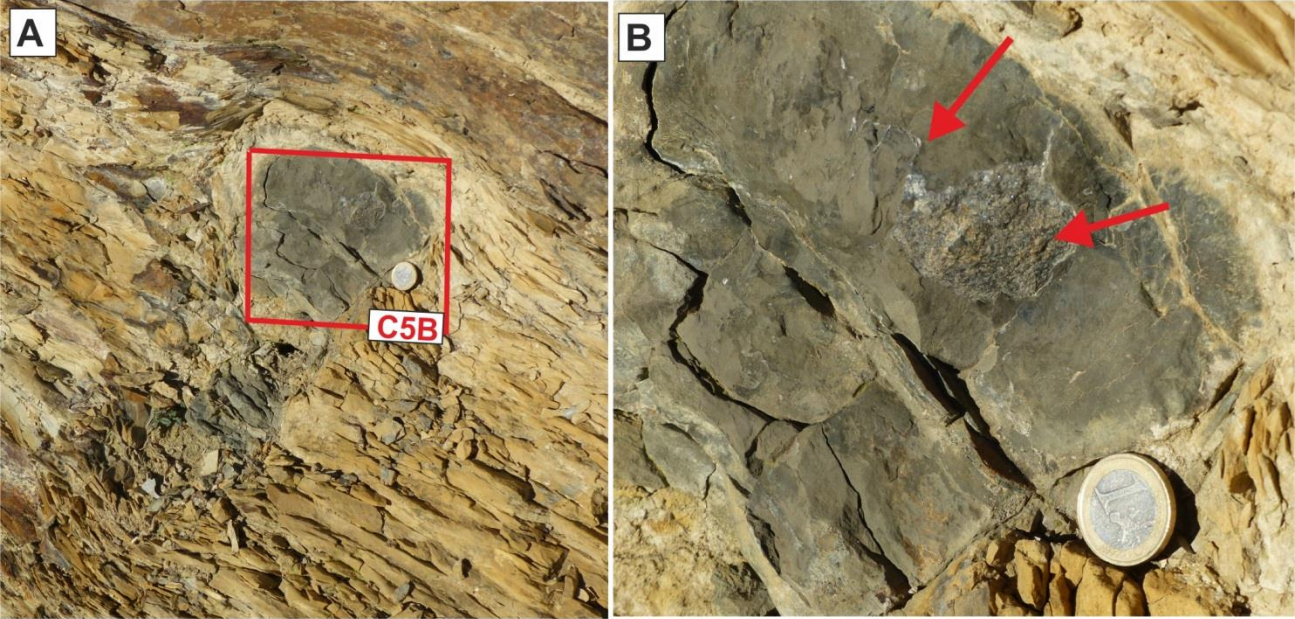


Fig. C6. Photographs showing microfacies of samples collected in the outcrop (see Fig. C2 for location). All samples were stained with Alizarine Red and potassium ferricianide. Samples S1-S4 were taken from stratigraphic beds below the supposed “dropstones”; samples S5-S7 were obtained from the supposed “dropstones” and S8-S11 were obtained from beds above the supposed “dropstones”. Samples S2 and S3, collected below the supposed “dropstones”, are composed of dolomitic mudstone, identical to that of the “dropstones” (S5-S7). Note also the occurrence of ostracods in most of the samples (white arrows). Perpendicular and/or oblique fractures to stratification, filled by calcite are also observed in most of the carbonate samples. Samples S1, S4 and S8-S11 consist of siltstone and sandstone and show that the gradual grain size increase, alleged by Rodríguez-López et al. (2024) in their Fig. 2B, does not occur. The polarity of the samples is marked by yellow arrows.

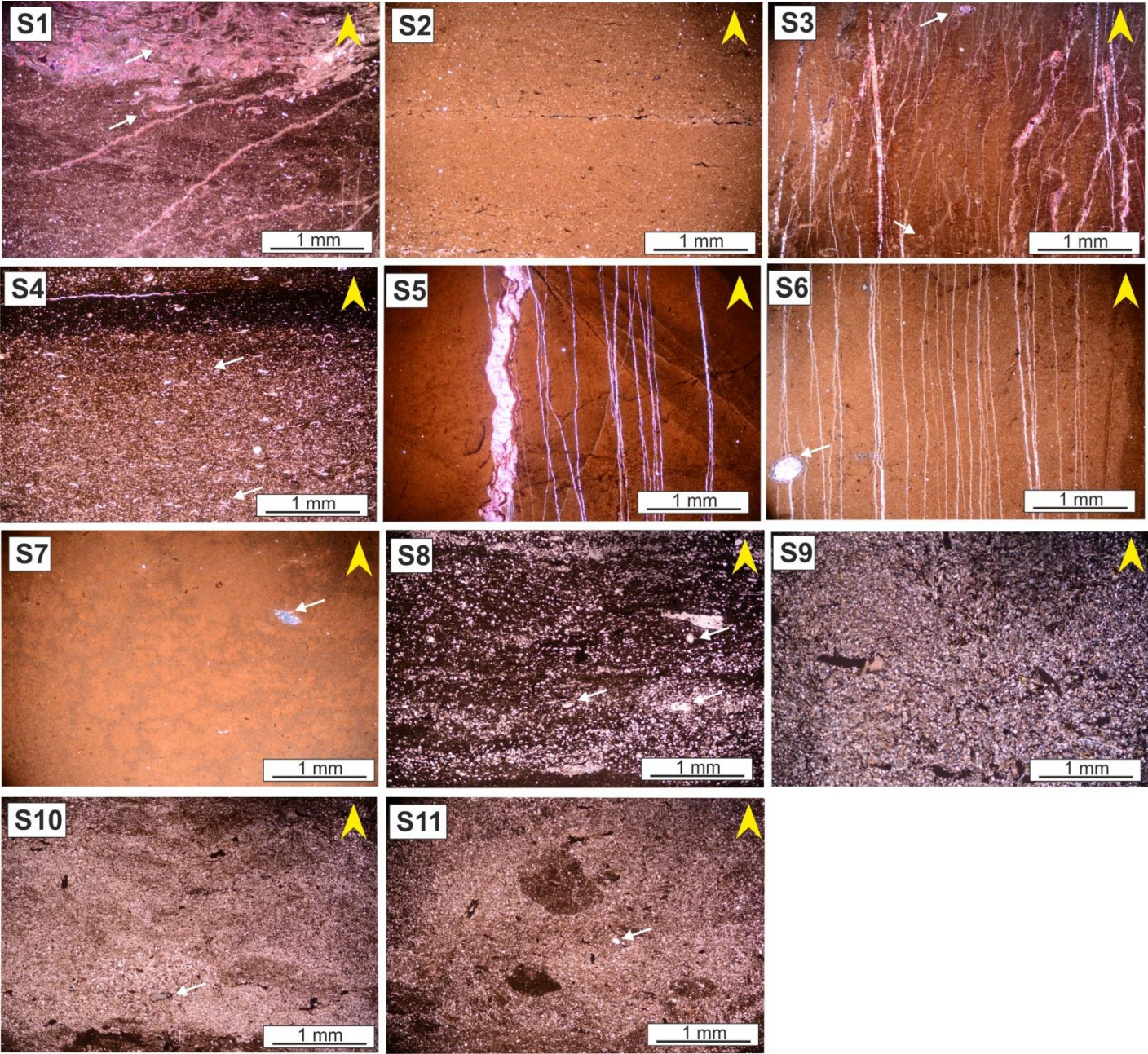


Fig. C7. Photograph showing sediment deformation without having any overlying “dropstone” (red squares). These deformation features are typical of dinosaur footprints. See location in Fig. C2.

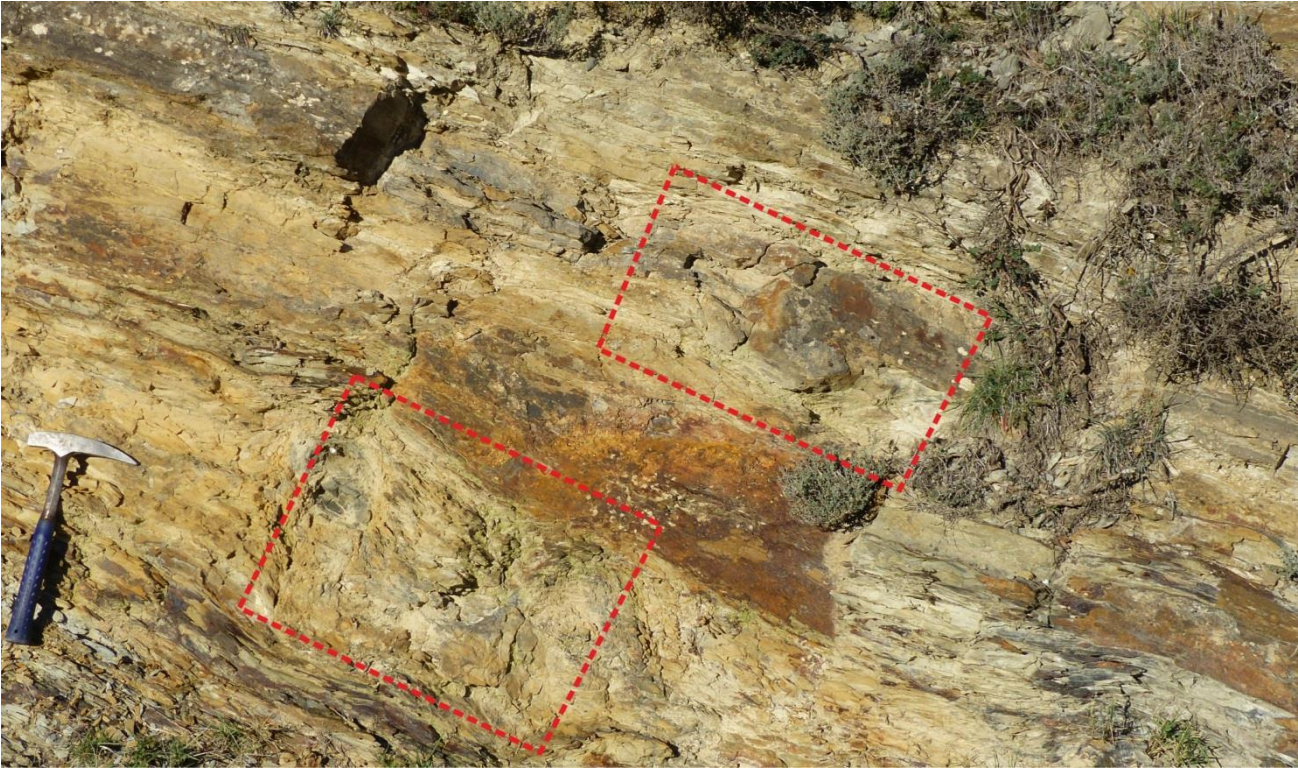


Fig. C8. Photographs showing cleavage (red squares) in the studied outcrop (see location in Fig. C2). The cleavage, associated to the metamorphism of the Cameros Basin, is oblique to the bedding and can be observed at different stratigraphic levels, not only in the one interpreted as a basal ice-related shear band by these authors. One euro coin ($\varnothing = 2.35$ cm) for scale.

